DISN Access Transport Services (DATS) Industry Day
10 May 2004

Industry Day
Agenda

Time	Subject	Presenter
0730 – 0830	Registration	DNG-PMO
0830	Welcome to Industry Day	Mr. Shirley
	Introduction to DISN/GIG-BE	Mr. Montemarano
	RFI Considerations	Mr. Shannon
	30 Minute Break	Mr. Shirley
	Q & A	Mr. Montemarano

Industry Day
Administrative Remarks

- **Red badges must be escorted by DISA staff**
- **Breaks as needed**
- **No food or drinks in conference room**

MENS
WOMENS

MENS
WOMENS

DISN Next Generation
Hierarchy

Program Director
Tony Montemarano

Chief Executive Engineer
Dave Mihelcic

Program Manager
Randy Shirley

Deputy Program Manager
Tim Shannon

Purpose
Communicate

- **Unclassified** forum
- **Opportunity to clarify RFI**
- **Answer questions**
  - **Open microphone during Q&A**
  - **Minutes/Q&A published on DITCO web site**
- **No commitment from the Government**
- **Nothing is to be construed as binding**
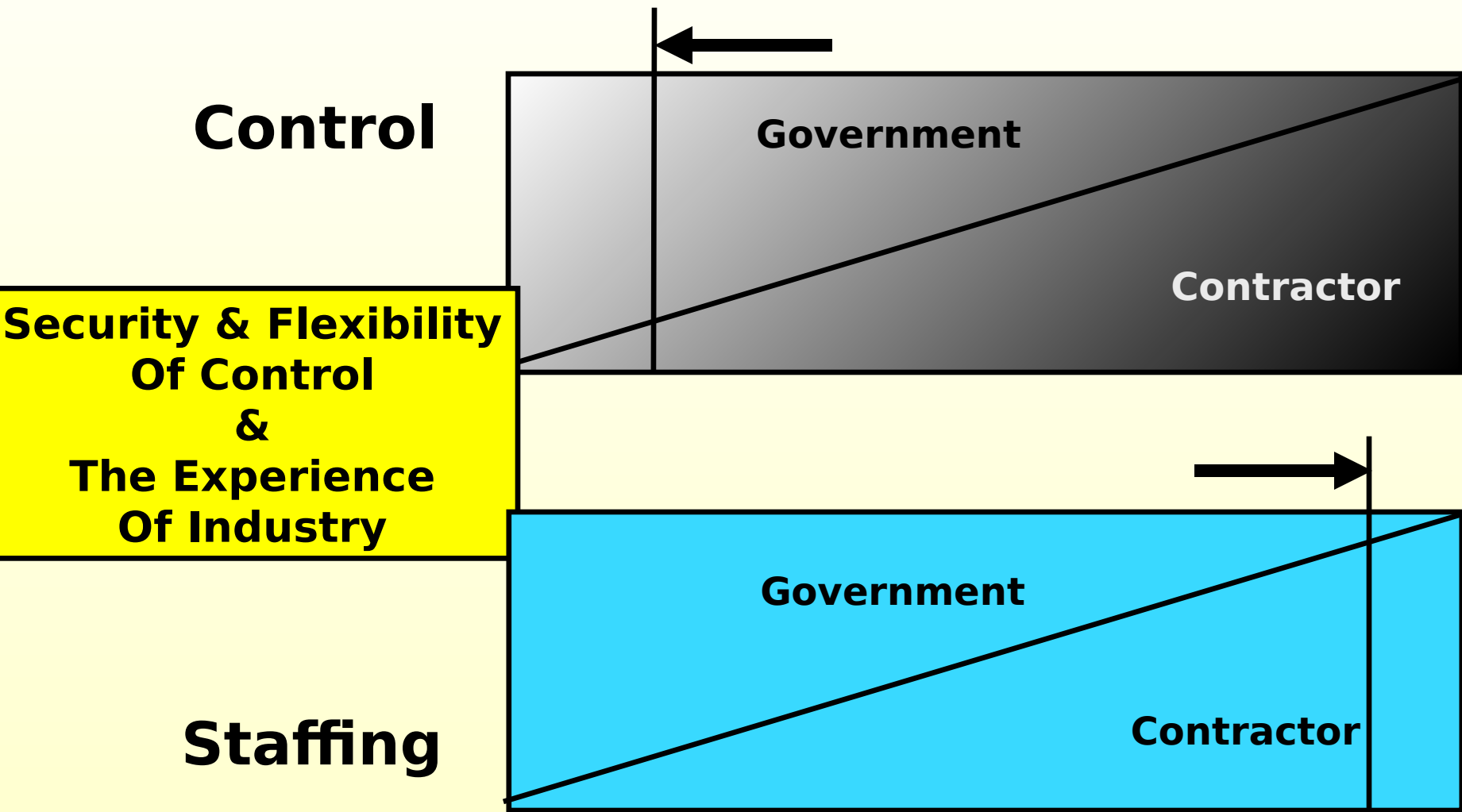- **RFI responses by 24 May < 10 pages**

Dialog with Industry

DISA Industry Relationship
Providing Network Services

Control

Government

Contractor

Government

Contractor

Staffing

Elements of the DISN
Commonly Understood

VOICE	(Unclassified)	**Defense Switched Network (DSN)**	
	(Classified (S-TS))	**Defense Red Switch Network (DRSN)**	

DATA	(Unclassified)	**IP Core (Gigabit Switch Router Network)**
		uNclassified but sensitive IP Router Network
(NIPRNET)	(Classified (S))	**Secret IP Router Network (SIPRNET)**

VIDEO	(Common User (U-TS))	**DISN Video Services - Global (DVS-G)**

TRANSPORT (Common User) **DISN ATM Service (DATMS)**

Muxed Svcs **IDNX Network**

DISN CONUS

Physical Layer **DISN Enhancement Program (DEP)**

DISN Pacific & HITS (Hawaii)

DISN Europe & Digital European Backbone (DEB)
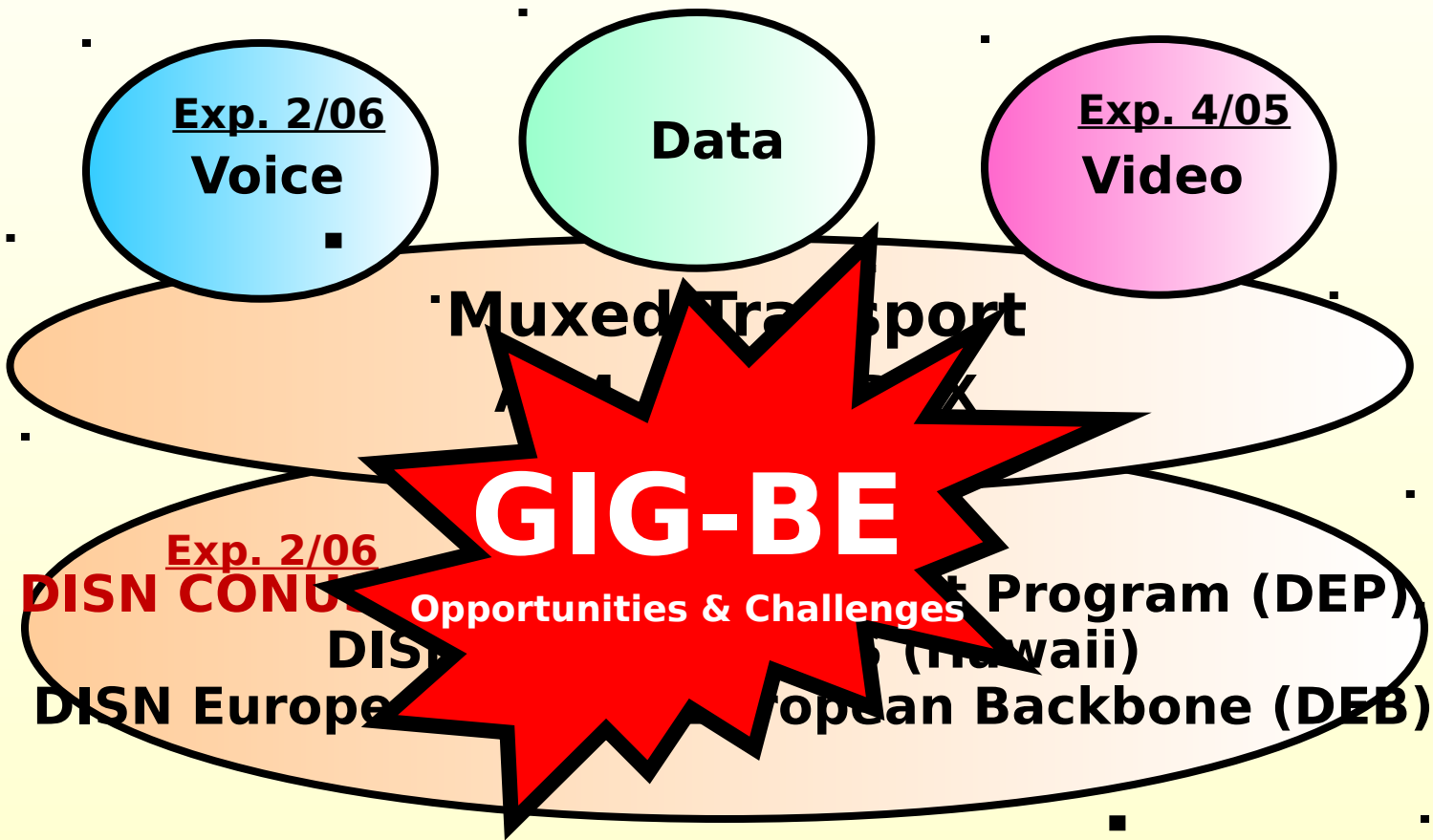
Functional Networks

DNG
Opportunities & Challenges

Hawaii

Voice

HITS

Exp. 2/06
Voice

Data

Exp. 4/05
Video

Muxed Transport

GIG-BE
Opportunities & Challenges

Exp. 2/06
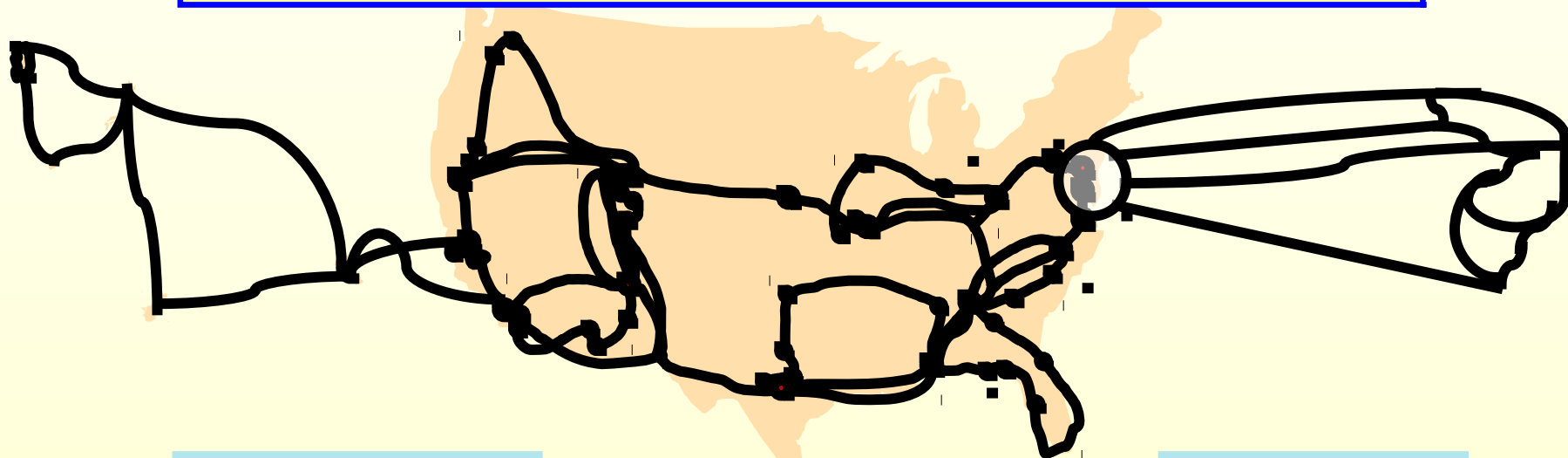DISN CONUS

DISN Europe

Program (DEP)
(Hawaii)
opean Backbone (DEB)

GIG-BE
Global Information Grid-Bandwidth Expansion

iquitous, Secure, Robust, Optical IP Terrestrial Netwo

Targeting 80-100 Locations Worldwide

Increased Bandwidth **&** *Physical Diversity*
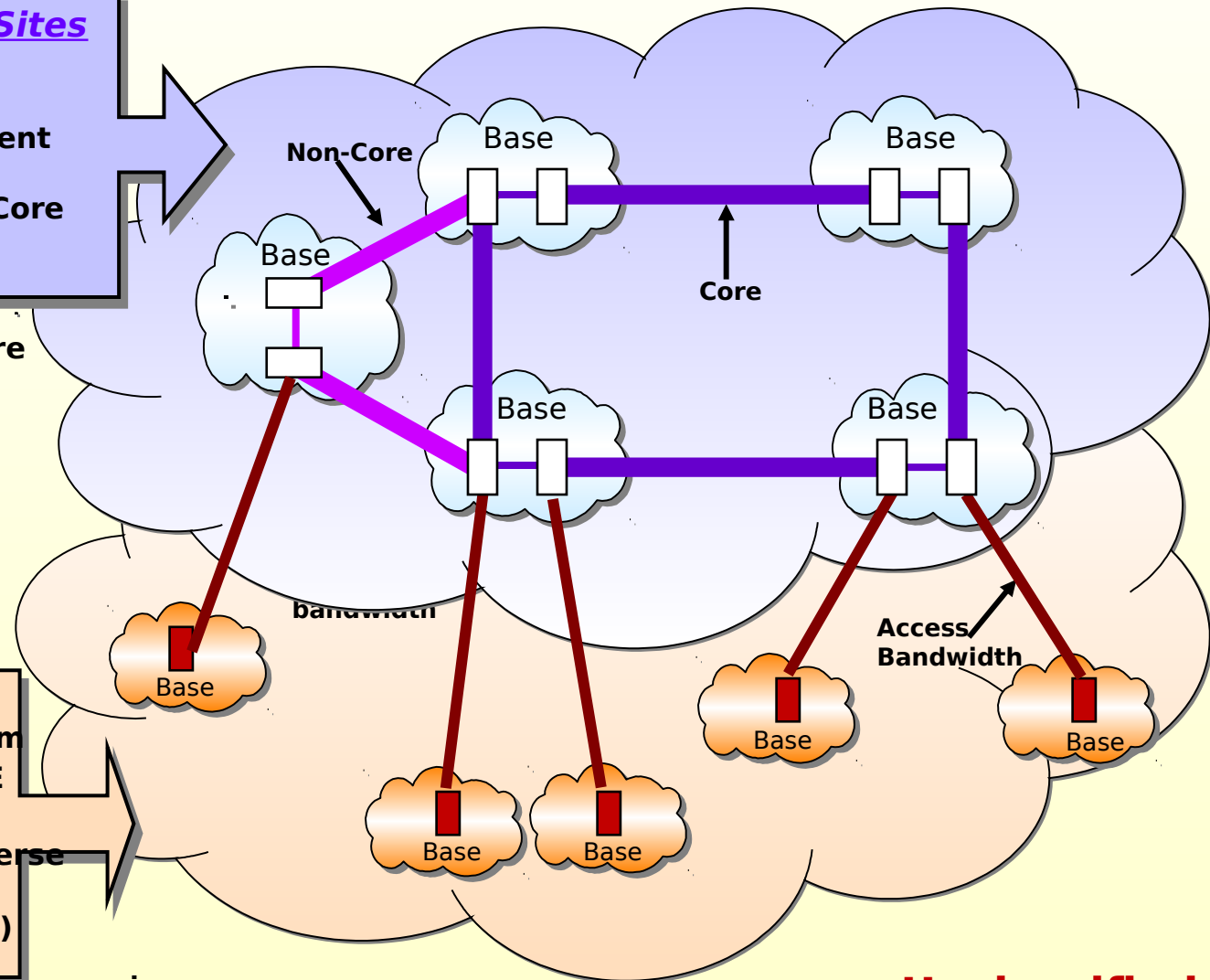
IOC Sep 04 ------ FOC Sep 05

DISN Migration to GIG-BE

GIG Bandwidth Expansion Sites (~90):
- **Funded by GIG-BE Program**
- **Redundant Switching Equipment (Where appropriate)**
- **Physically Diverse Access To Core**
- **2.5 to 10 GBPS Minimum (As Affordable)**
- **Minimal Latency**
- **Rapid Provisioning Across Core**

Other DISN Sites (~600):
- **Not funded by GIG-BE Program**
- **Optimized Access Into GIG-BE Sites**
  - **Possibility of Physically Diverse Routes In Metro Areas**
- **Up to 10 GBPS (As Affordable)**
- **Reduced Latency**
- **Reduced Provisioning Time**

Non-Core

Base

Base

Core

Base

Base

Base

Base

bandwidth

Access Bandwidth

Base

Base

Base

Base

Base

RFI Considerations
Potential Circuits

"The DISN Transmission Services CONUS (DTS-C) contract with AT&T and the DISN Switched/Bandwidth Manager Services CONUS (DS/BMS-C) contract with MCI are expiring over the next two years. These two contracts currently provide a large portion of the switching infrastructure and transmission services for the existing DISN in CONUS."

"The DISN CONUS Extension contracts (DTS-CE) are also used for DISN transport service, primarily for sub-T1 or short-haul circuits and will expire in approximately 5 years."

Bulletin Board Circuits as Appropriate.

New Requirements.

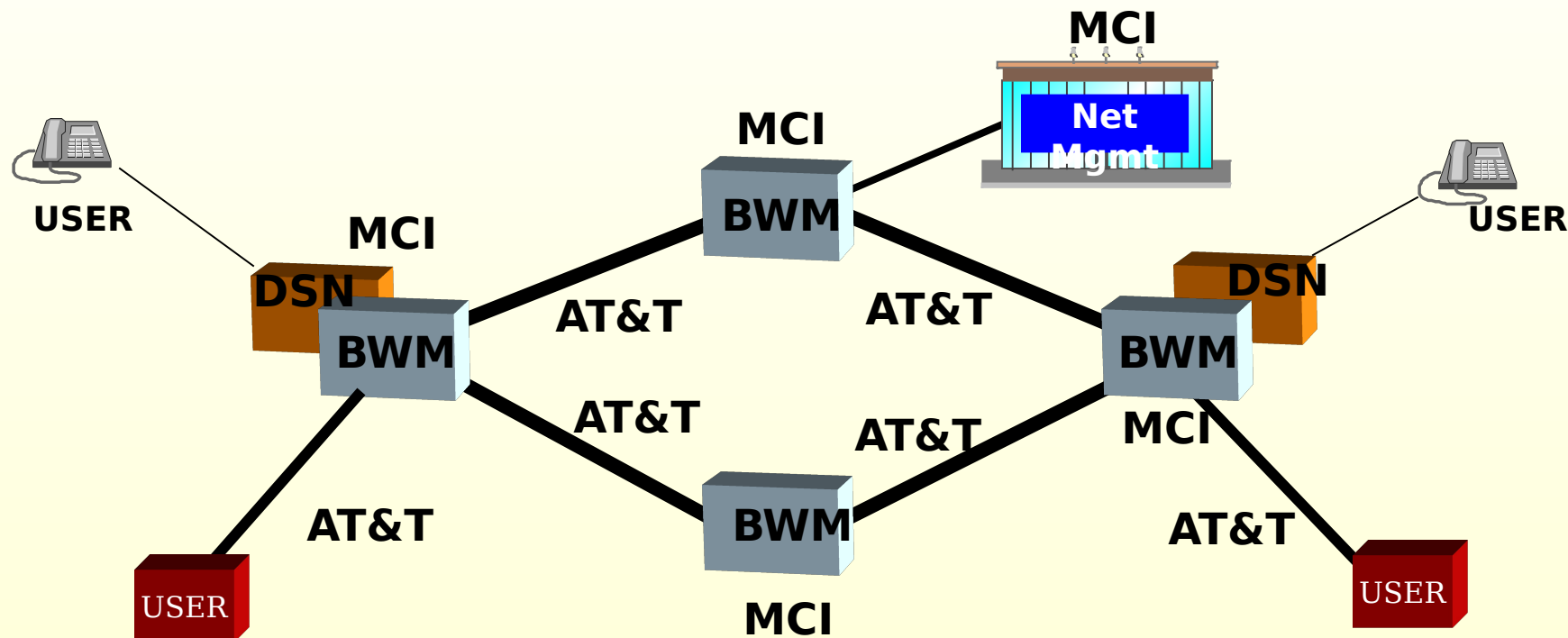# RFI Considerations
DTS-C + DS/BMS-C Contracts

MCI

Net Mgmt

MCI

BWM

USER

MCI

DSN

BWM

AT&T

AT&T

DSN

USER

BWM

AT&T

AT&T

AT&T

MCI

AT&T

BWM

AT&T

USER

USER

MCI

35 Bandwidth Managers(BWM) controlled by MCI
12 DSN Tandem Switches controlled by MCI
Roughly 4800 Circuits provided by AT&T

Expirations Effectively February 2006

RFI Considerations
DATS similar to DTS-C and DTS-CE

"It is anticipated that the DATS will provide services similar to those currently being provided by the DTS-C and DTS-CE contracts."
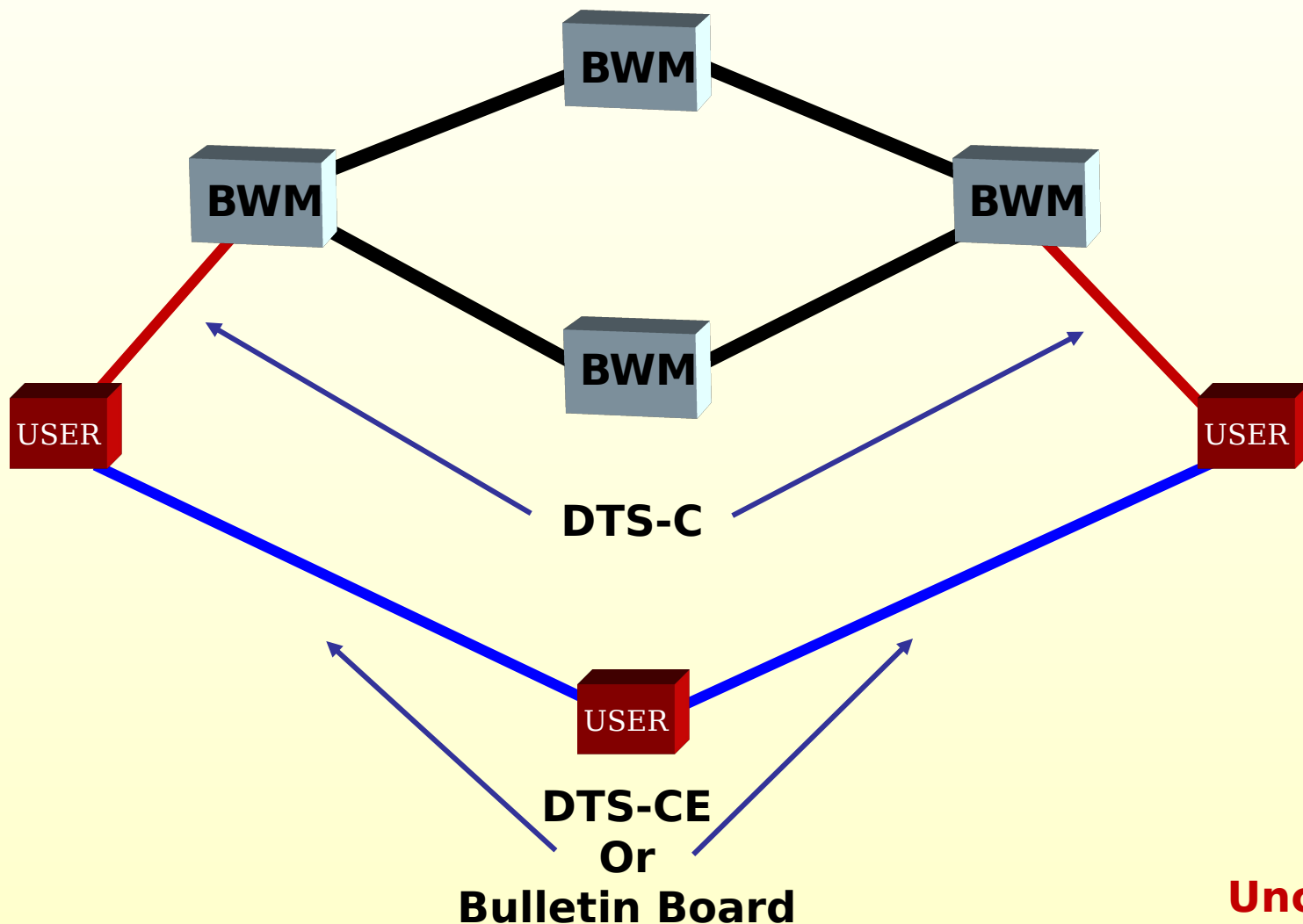
RFI Considerations
DATS similar to DTS-C and DTS-CE

BWM

BWM

BWM

BWM

BWM

USER

USER

USER

DTS-C

**DTS-CE
Or
Bulletin Board**

RFI Considerations
"Last Half Mile" to meet DOD customer requirements

"'Last-Half Mile,' Base/Post/Camp/Station Inside Wire, Facilities issues and other Access issues have been on-going challenges for DISA in meeting the telecommunications requirements of its DOD Customers."
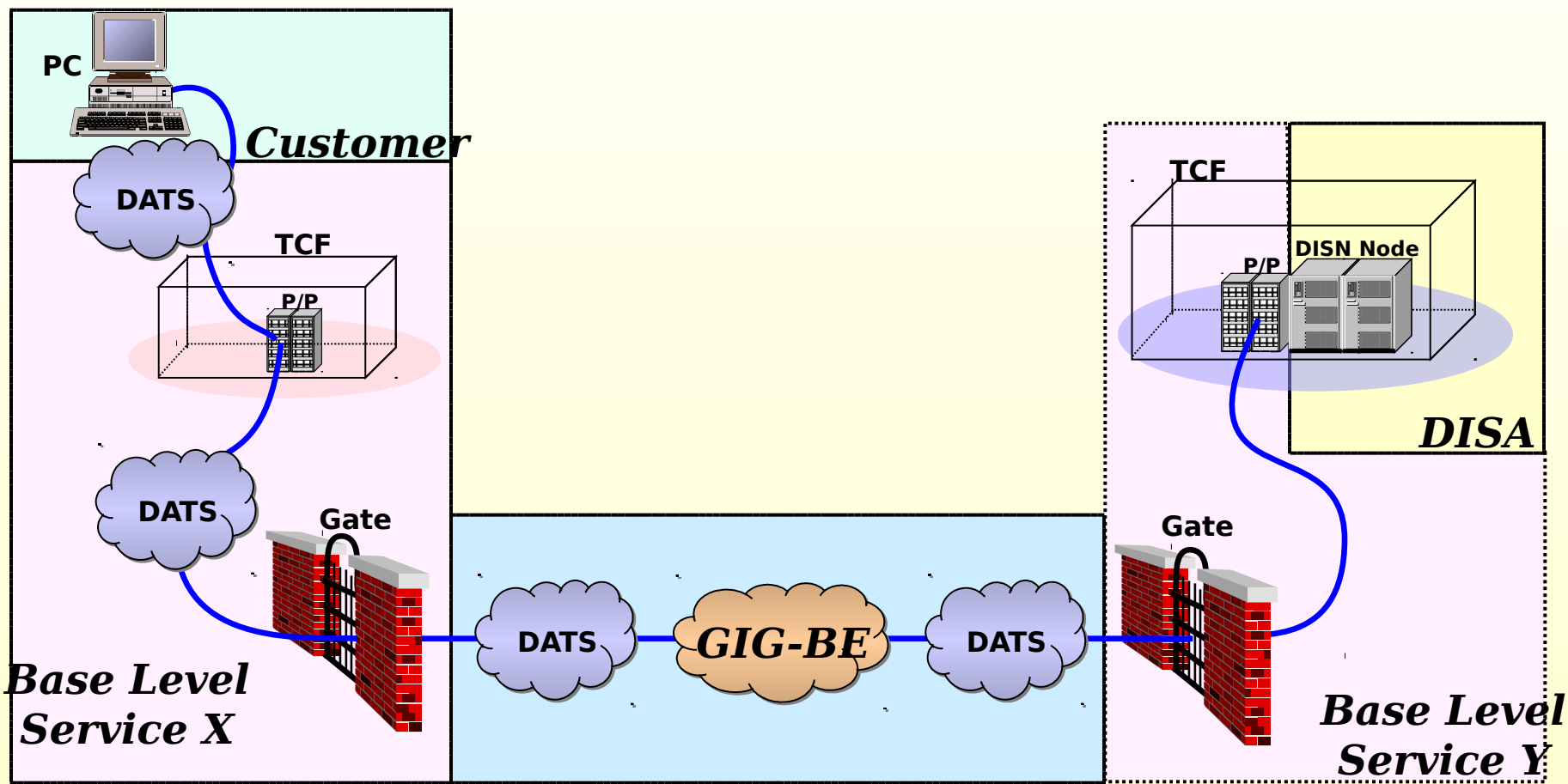
RFI Considerations
"Last Half Mile" to meet DOD customer requirements

PC

Customer

DATS

TCF

P/P

DATS

Gate

Base Level Service X

DATS

GIG-BE

DATS

Gate

TCF

P/P

DISN Node

DISA

Base Level Service Y

TCF: Tech Control Facility

RFI Considerations
Circuit restoration

"Vendor accountability as it relates to circuit restoration is absolutely critical to guaranteeing overall network availability. The vendor must have a real-time capability to monitor and manage transmission facilities 24x7 to ensure that services are delivered in accordance with DISA requirements. Capabilities and plans for providing customer network management, peering partner relationships or customer-carrier electronic bonding through web services for on-line service activation, inventory, alarm notification, trouble management
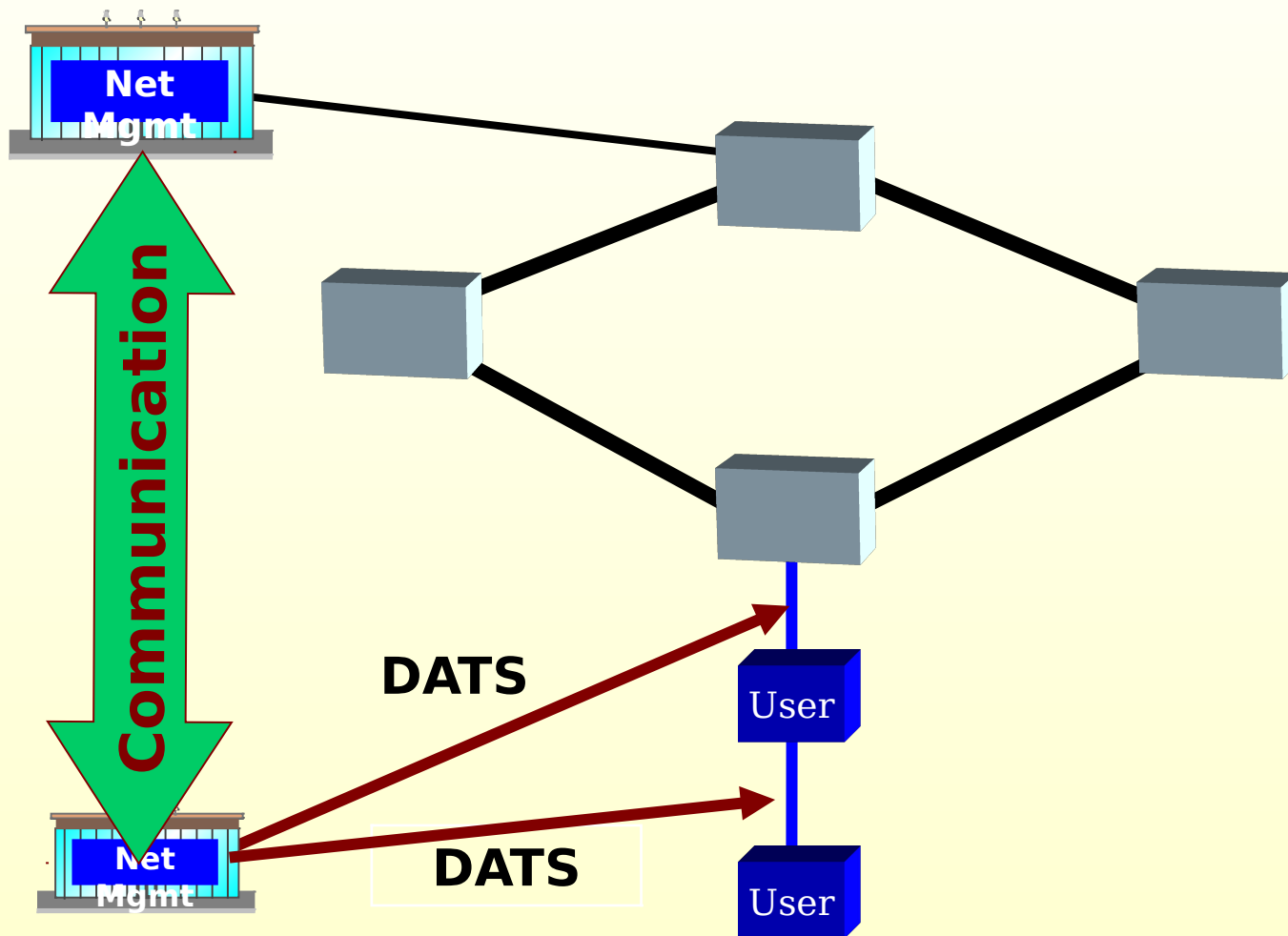
RFI Considerations
Circuit restoration

Communication

Net Mgmt

Net Mgmt

DATS

DATS

User

User

RFI Considerations
Integration with High Bandwidth Backbone

There will be an existing High Bandwidth Backbone that must be integrated with services acquired under DATS and, potentially, other contractual actions that may follow. The DATS will be used to connect users to that network and to other users within CONUS. Vendor provided circuits will be terminated at commercial demarcs and extended by either the Government or the vendor to terminate on government-owned equipment
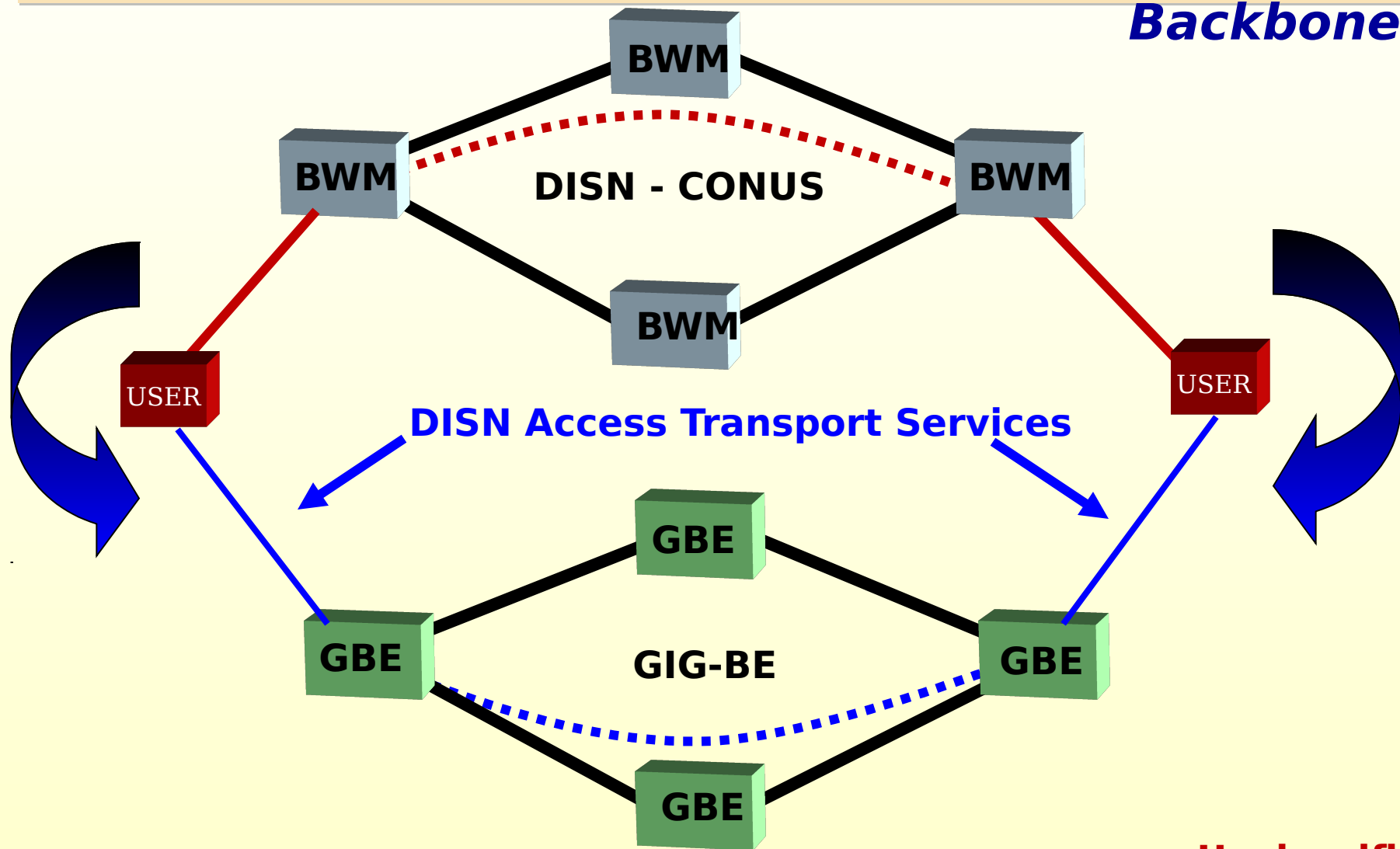
RFI Considerations
Integration with High Bandwidth Backbone

BWM

BWM   **DISN - CONUS**   **BWM**

BWM

USER   **USER**

DISN Access Transport Services

GBE

GBE   **GIG-BE**   **GBE**

GBE

RFI Considerations
Reconfigure bandwidth with minimum intervention

"**The Government desires to provision a variety of transmission services across OC-N trunks using Multiple Service Provisioning Platforms (MSPP's). Clear channel service with virtual concatenation is desired so that DISA may control and rapidly reconfigure leased bandwidth with minimum intervention by the vendor.**"
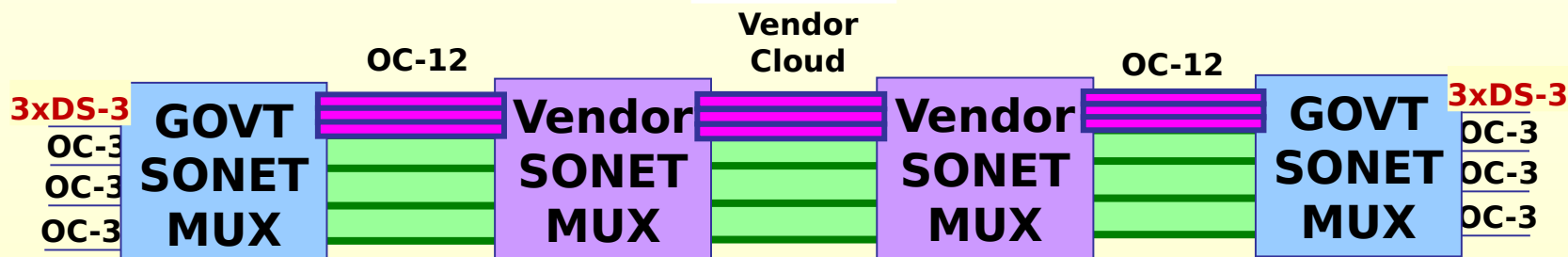
RFI Considerations
Reconfigure bandwidth with minimum intervention

- **Clear Channel, Auto Concatenation, SONET wave services are critical for DISA's provisioning process**
- **DISA desires DATS to enable this feature when the OCn trunk is provisioned**
- **The advantage of Clear Channel, Auto Concatenation, SONET wave service, is that it would not require DISA to coordinate with the vendor to change how the bandwidth is being utilized. This will speed up DISA's provisioning process.**

EXAMPLE

TOMORROW

Vendor Cloud

OC-12   **OC-12**

| 3xDS-3 | GOVT SONET MUX | | Vendor SONET MUX | | Vendor SONET MUX | | GOVT SONET MUX | 3xDS-3 |

OC-3
OC-3
OC-3

OC-3
OC-3
OC-3

The Vendor's equipment detects the change through the overhead and their systems reconfigures automatically to accept the new DS-3s

RFI Considerations
Aggressive transition schedule

"Over 9,000 circuit actions are anticipated during the transition from services provided by the DTS-C and DTS-CE contracts. The DTS-C transition (approximately 7,000 circuits) must be completed as quickly as possible. Industry strategies to meet an aggressive transition timeline are another issue of great interest. The Government is considering offering contractual incentives for accelerated service delivery during this transition and is interested in recommendations on how best to

RFI Considerations
Aggressive transition schedule

DS/BMS - C   *Expires Feb 06*

DTS - C   *Expires Jul 06*

DTS - CE   *Expires Mar 09*

RFI Considerations
Industry strategies to reduce delivery times

"During the sustainment phase, the Government is interested in strategies, including incentives and remedies, to encourage service delivery times in the 45-90 day range. Strategies should also address ways to streamline the vendor's service order process and other possible partnerships between DISA and industry to reduce delivery times."
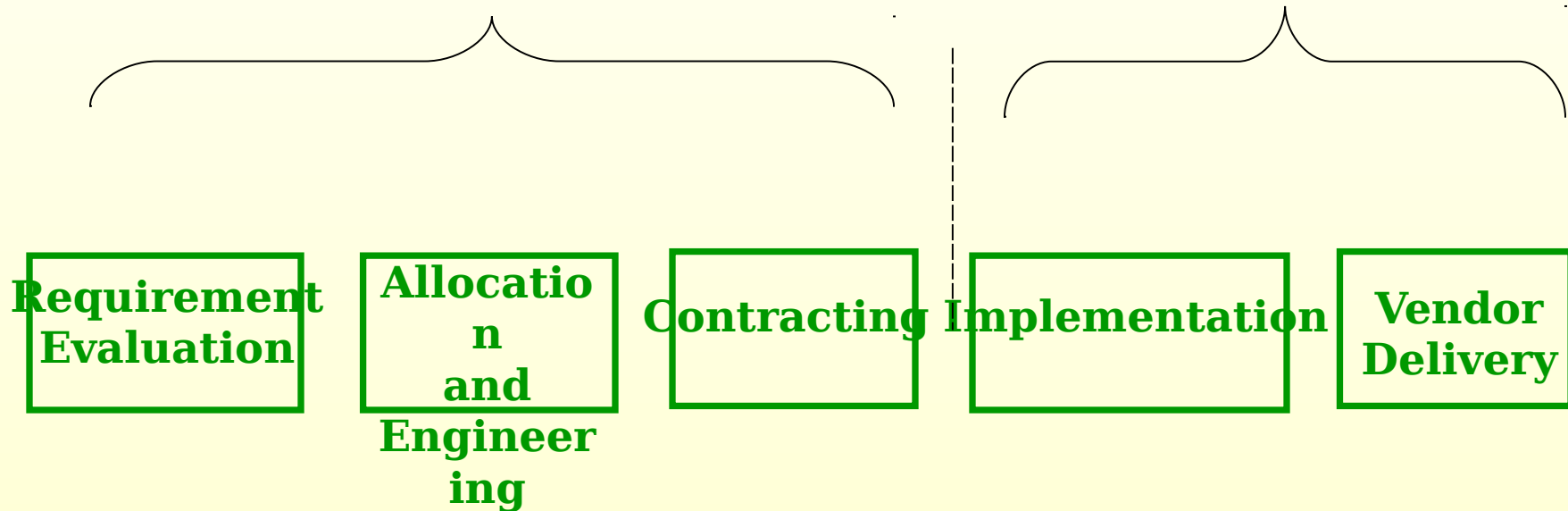
RFI Considerations
Industry strategies to reduce delivery times

Engineering The Solution   **Delivering The Solution**

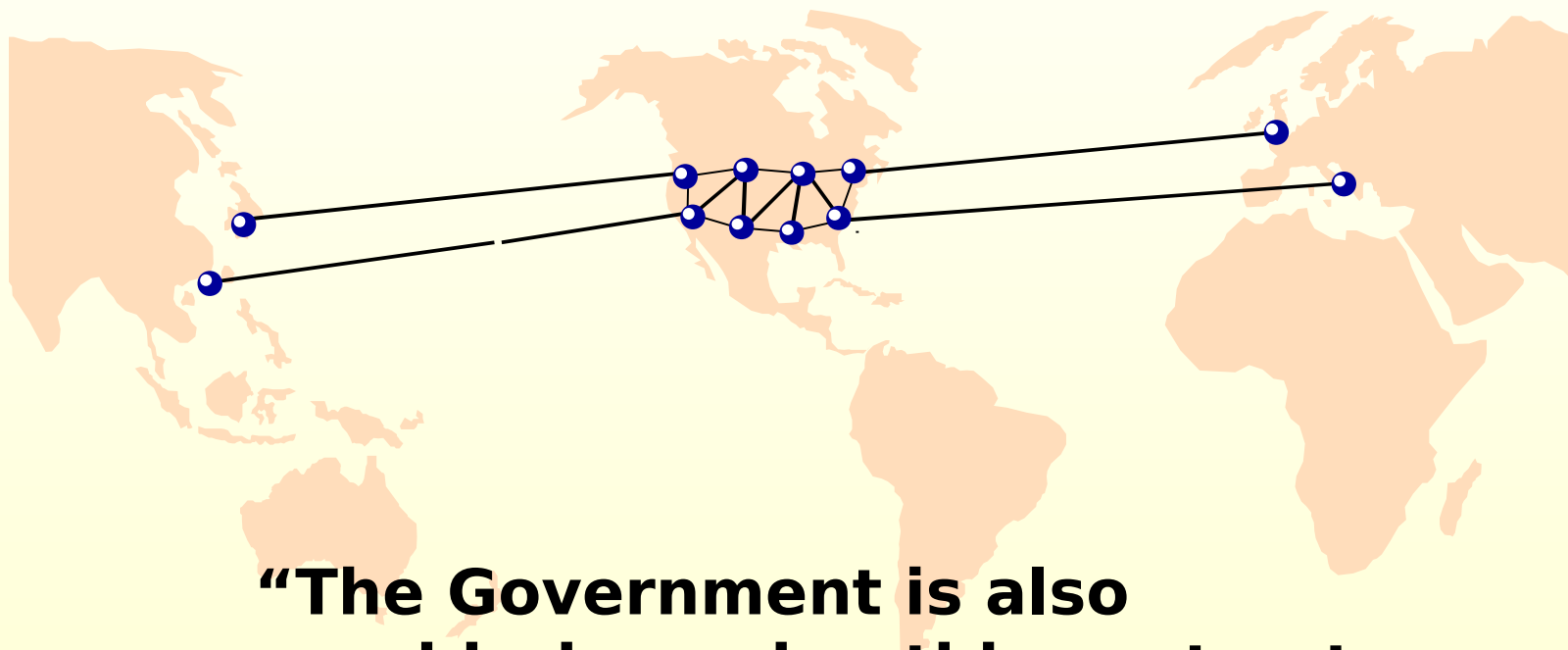| Requirement Evaluation | Allocation and Engineering | Contracting | Implementation | Vendor Delivery |

RFI Considerations
CONUS to OCONUS connectivity

"The Government is also considering using this contract to provide CONUS to OCONUS connectivity and is interested in comments on this subject."

Industry Day
Way Ahead

11 May – Continue to take questions
14 May – Post minutes and Q & A on DITCO web site
24 May – RFI responses due

30 Minute Break
- Reconvene -
Question and Answer session with Open Microphone

11 May – Continue to take questions
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Defense Information Systems Agency